BULLETIN
OF THE
TASMANIAN FIELD NATURALISTS CLUB INC.

August 1997 **Number 287**
Editor Andrew Walsh

The Tasmanian Field Naturalists Club Inc. encourages the study of natural history and supports conservation. We issue our journal *The Tasmanian Naturalist* annually in October. People with a range of backgrounds and knowledge are welcome as members.

Contact Genevieve Gates (03 6227 8638) for further information, or write to GPO Box 68A Hobart 7001

PROGRAM

General meetings start at 7:45pm on the first Thursday of the month in the Life Sciences Building at the University of Tasmania. Outings are usually held the following weekend, meeting at 10am outside the Tasmanian Museum and Art Gallery entrance, Macquarie St. *If you are planning to attend an outing but not the meeting prior, check as to the timing of the excursion as sometimes unforseen changes occur.*

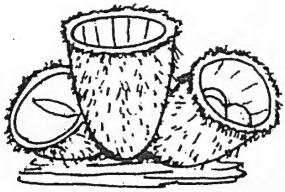
7th Aug	Leon Barmuta, University of Tasmania. Aquatic Invertebrates.
10th Aug (Sun)	Mountain River. Meet at the museum normal time or at the Grove Supermarket between 10:30-10:45. Bring hand lenses and gumboots. We will be stopping at three locations along Mountain River and taking samples to have a closer look at the aquatic invertebrates.
4th Sep	George Creswell, CSIRO. Ocean currents around Tasmania and the life cycle of marine creatures. **Talk to be held at the CSIRO Marine Laboratories, Battery Point.**
7th Sep (Sun)	To mark Threatened Species Day we will be joining a walk and talk presented by Kris Shaffer. Discover how to encourage bandicoots, plant a wildlife corridor and identify rare plants. The day has been organised by Parks & Wildlife and will be held at **94 Morphetts Rd, Neika, (4 km past the Ferntree Tavern, turn right) at 10am.**
26th Sep	Happy 93rd Birthday Tasmanian Field Naturalists Club! (see article in this issue).
2nd Oct	Mike Bidwell, Glenorchy City Council. Management of the Goat Hills Reserve.
4th Oct (Sat)	Walk around C. N. Pierce Reserve, Goat Hills (behind Glenorchy).
6th Nov	Craig Proctor. Crabs
8th Nov(Sat)	Orchid, bird and crab walk at Orford.

Editors Note

Note that the talk on Thursday 7th Aug at 7:45pm is at the CSIRO Marine Laboratories, Battery Point. Also, for the field trip on the 7th of Sep we meet at Neika at 10.00am. I apologise for the absence of the Marine Naturalist Program this issue, unfortunately they had not finalised their schedule before the publication of our bulletin. However, they do have a talk by Prof. Craig Johnson on the new Tasmanian Marine Research Institute and the role of community groups in marine research, at 7pm 10th Sep in the Brownlow Room Hampden Community Centre 84 Hampden Rd, Battery Point. Another activity many may be interested in attending will be held by the Understorey Network on Sun 14th Sep at Waverley Flora Park, Bellerive. This wildflower walk will be taken by Mark Fountain, and it starts at the Winifred Curtis Memorial Gates at 10:30 am (in Mercedes Place off Lanena St.).
Mail your bulletin contributions to Andrew Walsh at 146 Misty Hill Rd Mountain River, 7109, or e-mail Andrew.Walsh@forestry.tas.gov.au

The Birds Nest Fungus

By David Ratkowsky



A curious fungus, known as a Bird's Nest Fungus, was collected by Els Hayward in her backyard, and delivered to David Ratkowsky by Genevieve Gates. David has never collected a bird's nest fungus himself, and has only seen one on a previous occasion, when one was brought to the Mycology Lab. by its collector. David asked Alan Mills, mycologist in the Plant Science Department of the University of Tasmania, if he could identify the fungus. Alan told David about a book entitled "The Bird's Nest Fungi" by Harold J. Brodie, a Canadian expert in the Nidulariaceae, the family embracing these curious fungi. David borrowed the book from one of the University libraries, and, using the information therein, gave a short talk at the June TFNC meeting about these fungi.

The fruiting bodies of these fungi are vase-shaped or bell-shaped, with the 0.5-2 cm high cups filled with small lentil-shaped bodies resembling seeds. The whole of the fruiting body looks like a miniature bird's nest containing "eggs", hence the common name. The family name is derived from nidula, which means a small nest. All species are saprophytic and are usually found in moist or shaded locations, and grow upon decaying wood, old fibrous material such as sacking, on the excrement of domestic farm animals, or in humus-rich soil. The fruit bodies are tough and leathery and are resistant to decay, persisting for a long time. Els' collection was obtained from specimens growing on old fibreboard under a dripping water tap.

There are several different structures to these fungi, with the eggs, or "peridioles", which contain the spore mass, being attached to the fruiting bodies in some species, but free from the walls in other species. Their mechanism of dispersal is a strange one, with the vase-shaped or funnel-shaped sporocarps serving as a kind of "splash-cup", from which water droplets (from rain or dripping water) land in the open mouths of the cup and discharge the peridioles by the force of their impact. Laboratory tests conducted by Brodie in the 1950's showed that large raindrops, which may have a terminal velocity of 4-8 metres per second, can forcibly eject the peridioles a horizontal distance of over 80 centimetres. Other known means of dispersal involve transport by herbivorous animals, rafting on wood and inadvertent dispersal by human agricultural practices.

Are Bird's Nest Fungi rare plants, or are they just overlooked? Perhaps the following anecdote, related by Harold Brodie, might answer that question. Brodie had attended a botanical congress in Stockholm and spent several days visiting Dr. Vandendries, a renowned Belgian mycologist, at his villa "La Chanterelle". They had not seen each other for 18 years, and B. asked V. if the latter had found any Bird's Nest Fungi during the previous 18 years. V's reply was "No", except for one species that he found in the Forest of Fontainebleau, near Paris. B. then suggested to V. that they might go and have a look in the latter's garden. "Gladly", replied V., "but it would be miraculous to find your beautiful Bird's Nests full of eggs in my garden". They walked down the steps to the stone terrace, where B. pushed aside a solitary rose-bush that had survived a severe frost from two years before. He pulled away some dead leaves and there were little brown cups of *Cyathus striatus*, many of which still contained peridioles. V. uttered a cry of astonishment, and with trembling hands, probed elsewhere. The ground proved to be a veritable culture of beautiful peridiole-filled vases. Some peridioles were found about 50 cm from the nearest cup fungus, to where it had been ejected. Searching under some shrubs along a hedge, B. found seven white buttons, the future vases of yet another species (*Cyathus olla*). To his friend, V. remarked "I had eyes but did not see". Have you looked under a hedge in <u>your</u> garden recently?!

Tasmania and the Trobriand Islands Part 1

by our overseas correspondent Don Hird.

The Trobriand Islands lie in the Solomon Sea about 150km north of the eastern tip of mainland PNG. They are one of several groups of islands sited on a large shallow shelf. Like Tasmania, they were connected to mainland Australia during the last ice-age. Geologically the Trobriands are uplifted coralline limestone although altitude rarely exceeds 100 metres. Biogeographically they are part of the Australo-Papuan region.

Differences at the family-level and above are the main topic of this article. A few similarities also occur between Tasmania and

the Trobriands, prompting a whim of nostalgia.
Palms are the most obvious difference in the local landscape. Coconuts dominate the skyline around human settlements, with the much esteemed betelnuts close behind. Sago is uncommon here, but several other palms are prominent in remnant rainforests. Palms reach Victoria, but not Tasmania.
Botanically the differences appear to vastly outweigh the similarities. Some leguminous trees are locally recognizable, for example large ancient-looking pinnate *Acacias*. Other legume trees include some smaller tropical species like Riga (*Lucaena* spp.), and valuable timber trees like Kwila (*Intsia* spp.) and Rosewood (*Pterocarpus* spp.). A fern like *Blechnum* is common here but tree ferns are apparently absent. A *Casuarina* is present on an offshore island here; Tuma Island is reputed to be the local Isle of the Dead- perhaps it is the sound of wind whispering through the needles.
Structurally the local vegetation has a lush and rampant tropical look. Epiphytes often festoon trees and climbers of every size are common. Buttressing is common, particularly where trees grow in coastal sands. Other trees tower from roots apparently in bare rock. Deeper soil areas are given over to intensive gardens. Yams, taro and sweet potato are the main crops, together with bananas. A 3-7 year fallow cycle is practiced and much effort goes into preparation, maintenance and exclusion of pigs.
Marsupials here are a tropical bandicoot, a cuscus and the Agile Wallaby also found in northern Australia, evidence for the recent landbridge. None are common and all are hunted. Fruit bats and blossom bats are prominent groups absent from Tasmania.

Birds are not as common or diverse on smaller islands as on the PNG mainland. Familiar species include Sea Eagles, crested terns and the Sulphur Crested Cockatoo. Our most prominent bird locally is the common Koel, a cuckoo with a strident, occasionally nocturnal, call. Perhaps the most spectacular tropical birds visually are frigate-birds, aerial pirates which are extremely streamlined and regularly seen as flocks in silhouette.
Reptiles include crocodiles and turtles absent from modern Tasmania. Crocodiles are well known from a large mangrove swamp but not as common as previously, they are farmed on a small scale. Turtles of several kinds are taken by local people and nest on outlying islands. Pythons, monitors and geckoes, are families of reptiles which reach as far south as Victoria, but not Tasmania. Local skinks are extremely fast-moving, including one with an electric-blue tail used as a display.
Further notes will have to await a further bulletin. Invertebrates are prominent and often spectacular here. The marine world is similarly colourful and diverse. Much of the detail and the neighbouring islands awaits further exploration. Wait for the next episode.
Don Hird

History of the T.F.N. Club Revisited

by Andrew Walsh

There has been some discussion at the past few meetings with regards to the age of our club. In looking in our library I found a copy of the first issue of The Tasmanian Naturalist published in 1907, in which mention is made of the fact that at the time of publication the club had been in existence for over two years. Len Wall, at a recent meeting, also mentioned that his research had led him to find that the club had formed in 1904, and that he had previously written an article concerning the genesis of the club in The Tasmanian Naturalist. This was published in 1955, and it's probably worth revisiting some of that article to clear up the matter once and for all.
"A preliminary meeting to consider the foundation of a field naturalist's club in Hobart was held in the Royal Society's Room at the Tasmanian Museum, Hobart, on September 15, 1904, under the chairmanship of the Rev. H. H Anderson. After Mr. A. M. Lea had outlined the objects of such a club, all present agreed that a club was desirable, and a committee was appointed to frame rules. The meeting then adjourned."
"On September 26, this committee presented it's recommendations, and the rules drawn up were adopted. Thus the Tasmanian Field Naturalist Club came into being. Officers elected at this meeting were:- President,

Dr. Gerard Smith, Vice Pres. Mr. S. Clemes, Hon secretary-Treasurer, Mr. E. A. Elliott, Committee, Messrs. E. S. Anthony, A. Conlon, W. M. Harrison, A. M. Lea, A. Morton and J. C. Smith."

"The first field excursion held by the club was to Cascades on October 22, 1904, and this feature of its activities has continued throughout the years. In addition to day trips the early members set a record, perhaps unique in Australia, in organising an annual camp extending over five days."

"Ladies took a keen interest in the Club from it's inception, the first two being elected to the membership on Feb 27, 1905. The local daily newspaper had much to say at the time about the behaviour of these "intruders" in a gentleman's domain, but the publicity given seems to have served the Club well, as the membership had increased to 62 by the end of the first year- a very fine result."

"The Club lost no time in making it's presence felt in the community. One of its first acts was to protest strongly at the disposal of a complete set of Goulds 'Birds of Australia' from the Public Library, Hobart, for a comparatively small sum. It was, unfortunately, too late to prevent the sale, but it's prompt action impressed itself on the city fathers."

"During the year 1907 discussion arose as to a suitable form of badge for the club, and it was finally agreed to adopt the platypus as its emblem."

Extract from: History of the T.F.N. Club
By Leonard E. Wall
The Tasmanian Naturalist
Volume II No. 3 Feb 1955

Outing Reports

Snug Tiers 4th May 1997

By Kylie McKendrick

The May Field Nats excursion was up to the Snug Tiers and was lead by Peter McQuillan. It was an enjoyable outing with around about 22 of us turning up to wander along the old road at a leisurely pace looking at all sorts of plants, fungi and beasties. After Peters talk at the previous meeting on seed dispersal, we were on the lookout for Currawong pellets and the like (*found heaps too: Ed.*). We saw lots of beetles including an extra groovy one by the name of *Caryopsida deplaneta* (I hope that's how it is spelt!), one snail was found in the act of devouring another, also seen were three velvet worms, an assassin bug and a fungi that David 'The Fungiman' Ratkowsky had never seen before.

Forestier Peninsula 6 July 1997

by Kevin Bonham

Despite some enthusiasm at the meeting, only Audrey, Andrew and I eventually made it on the Forestier Peninsula trip to look for millipedes, centipedes and other invertebrates. We turned off at Murdunna and headed down a Forestry road called Hylands Road, aiming to find some oldgrowth habitat near the coast. However we only got as far as the start of the High Yellow Bluff track, where we searched for about an hour. We also later searched at a creek called Bellettes Creek, a few kilometres to the west. Both sites were in roughly 50 year old wet sclerophyll regrowth although the first was generally more open.

We found millipedes quite difficult to find at both sites; Bob Mesibov tells me this is normal for both peninsulas. At the first site we only got a few specimens of each species, a red *Rankodesmus* which Audrey found on a tree stump creating most interest. At the second site a small yellow or white *Atopodesmus* was very common especially under logs but other species were very scarce. In all we found six millepede species and three centipede species, and Bob Mesibov reports that although we found nothing rare the finds are useful records.

Unusually, snails were much commoner than millepedes at both sites, with ten species being found. The semi-snails *Helicarion cuvieri* and *H. rubicundus* were very common, with the two species sometimes living together, literally head-to-tail on the same piece of bark. We saw some very large specimens of *H. rubicundis,* a spectacular Forestier/Tasman Peninsula endemic with a yellow shell, green mantle, red and grey flanks and a purple foot. About the first piece of bark Andrew picked up also had a *Discocharopa mimosa* on it, a 75km range extension and a fluke as it is mainly a tree dweller. Other invertebrate finds included some interesting harvestmen and several different beetles. We also found a very bright Tasmanian Froglet (*Crinia tasmaniensis*) under a log.

I thank Bob Mesibov for identifying our specimens; the full list will be available once I have found it in the chaos of my flat.